

REMARKS

Claims 1-3 are pending in this application. By this Amendment, claims 1 and 2 are amended. Claims 4-33 are canceled without prejudice to, or disclaimer of, the subject matter recited in those claims. Reconsideration based on the above amendments and the following remarks is respectfully requested.

I. The Drawings Satisfy All Formal Requirements

The Office Action, in paragraph 2, objects to the drawings under 37 C.F.R. §1.83(a) as failing to show every feature of the invention specified in the claims. Specifically, the Office Action states that "a favorable voltage" and "an unfavorable voltage," as recited in claims 5, 6, 15, 16, 25 and 26 must be shown. Applicant respectfully submits that the cancellation of the enumerated claims renders the objection moot.

Accordingly, reconsideration and withdrawal of the objection to the drawings are respectfully requested.

II. The Claims Satisfy All Formal Requirements

The Office Action, in paragraph 3, objects to claims 6, 16 and 26 because of an informality. Specifically, in each case, the Office Action states that the term "voltage is" should be changed to "voltage" due to a grammatical error. Applicant respectfully submits that the cancellation of the enumerated claims renders the objection moot.

The Office Action, in paragraph 4, objects to claims 10, 11, 20, 21, 30 and 31 under 37 C.F.R. §1.75(a). Applicant respectfully submits that the cancellation of the enumerated claims renders the objection moot.

III. The Claims Are Enabled By The Specification

The Office Action, in paragraph 7, rejects claims 5, 6, 15, 16, 25 and 26 under 35 U.S.C. §112, first paragraph, as not enabled by the Specification. Applicant respectfully submits that the cancellation of the enumerated claims renders the rejection moot.

IV. The Claims Define Allowable Subject Matter Under 35 U.S.C. §102

The Office Action, in paragraph 10, rejects claims 1-3, 11, 21 and 31 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,877,738 to Ito et al. (hereinafter "Ito"). This rejection is respectfully traversed.

The Office Action appears to object informally, as a precedential matter, to certain of the language in claims 1, 11, 21 and 31. Claim 1 is amended in order to better clarify the language. Claims 11, 21 and 31 are canceled. Applicant respectfully submits that the amendments to claim 1 are not necessary to patentability of the claim but rather serve merely to better clarify the language of the claim. However, Applicant has not changed "the" to "said" for antecedent basis purposes, because such is not necessary. "The" and "said" are alternative forms and either can be used. At one time the use of the word "said" was fairly common. However, use of the word "said" is diminishing as unnecessary legalese.

Ito teaches a multiplex driving method and driving apparatus for a liquid crystal display device that provides a weighted voltage applied in accordance with desired display data in each of a plurality of intervals to achieve a gray scale display (Abstract). Figs. 7A-7C of Ito display multiple voltage levels, i.e., more than three predetermined voltages, usable to produce the gray scale gradations required of the method and apparatus disclosed. There is, for example, no specified relationship between V_{X1} (and $-V_{X1}$), V_{Y1} (and $-V_{Y1}$) and V_{Y2} (and $-V_{Y2}$), except where Ito states that it is "preferable that the relationship between each of the voltage levels is $2 \cdot V_{Y1} = V_{Y2}$ " (col. 19, lines 25-48).

Ito further teaches, in Figs. 9A-9C employing a pulse width modulation technique for achieving a gray scale display (col. 20, lines 56-58). Ito contemplates voltage values of 0, V_{X1} , $-V_{X1}$, V_{Y1} , V_{Y2} , $-V_{Y1}$, $-V_{Y2}$, and various combinations of additions and subtractions of these respective values, specifically in Fig. 9C. Ito does not disclose that any three of these voltages are applicable for both scanning signals and data signals.

Claim 1 recites, among other features, a liquid crystal display elements driving method comprising simultaneously applying scanning signals of one of three predetermined voltages to three scanning electrodes and applying a data signal of one of the three predetermined voltages to each of the prescribed number of signal electrodes. In other words, three voltages are applicable for both scanning signals and data signals. Employing the three predetermined voltages for the apparatus and method that are the subject matter of these claims provides the advantages that the drive voltages can be set lower and the number of drive voltage levels can be decreased with the result being that the total power consumption can be reduced and the power circuit and the driving circuit can be simplified (para. [0076]).

In view of the foregoing, Applicant respectfully submits that Ito does not teach all of the features recited in independent claim 1 and, therefore, a rejection under 35 U.S.C. §102 is inappropriate. Further, for the reasons discussed, Ito does not suggest the invention. Additionally, dependent claims 2 and 3, though containing separately patentable subject matter, incorporate all of the features of independent claim 1 from which they depend and are allowable for at least their dependence on claim 1.

Accordingly, reconsideration and withdrawal of the rejection to claims 1-3 under 35 U.S.C. §102(b) as being anticipated by Ito are respectfully requested.

V. Claims Rejected Under 35 U.S.C. §103 Are Canceled

The Office Action, in paragraph 12, rejects claims 4-10, 14-20 and 24-30 under 35 U.S.C. §103(a) as being unpatentable over Ito, and further in view of U.S. Patent No. 4,465,999 to Tsuzuki et al. (hereinafter "Tsuzuki"). Applicant respectfully submits that the cancellation of the enumerated claims renders the rejection moot.

VI. Conclusion

In view of the foregoing, Applicant respectfully submits that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-3 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned representative at the telephone number set forth below.

Respectfully submitted,



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JAO:DAT

Date: June 30, 2004

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